

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P591150

Luminaire Tested: **CTN-CA6-230-722-U-T3-SSS-HM-EX180**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591150
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-722-U-T3-SSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE, 180D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (6) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14501 lumens
Efficiency: N/A
Efficacy: 63.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

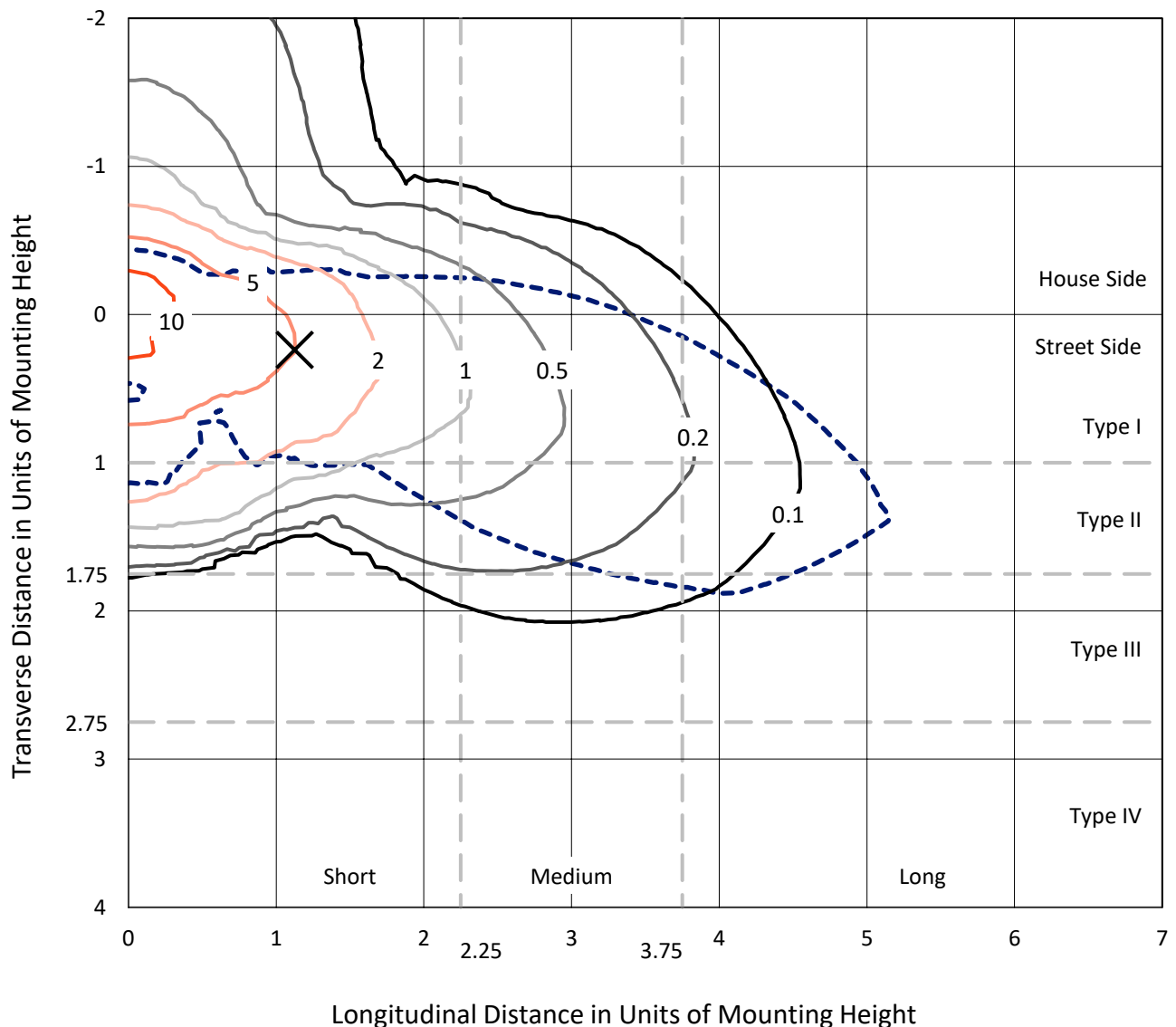
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

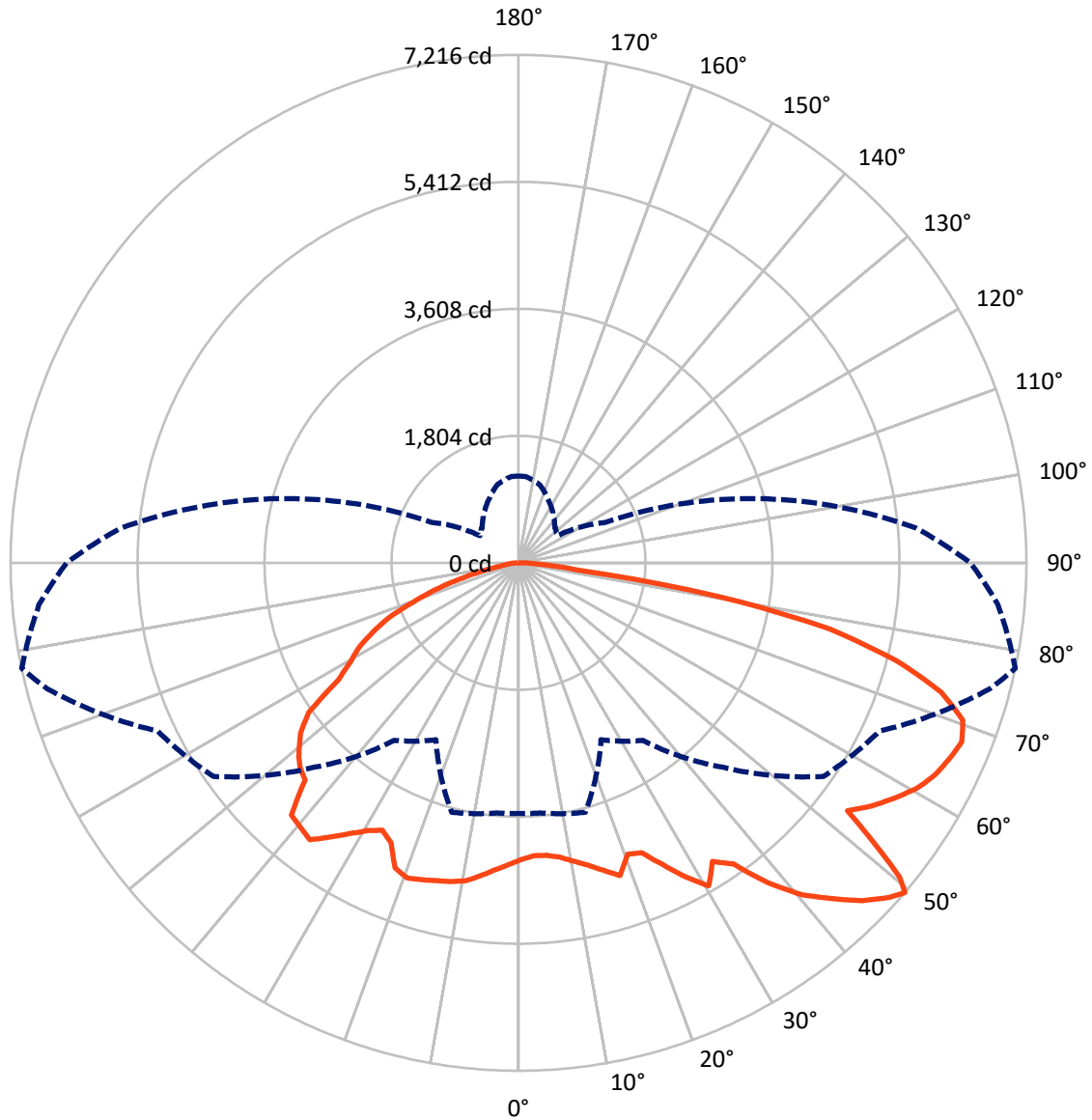
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 11.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

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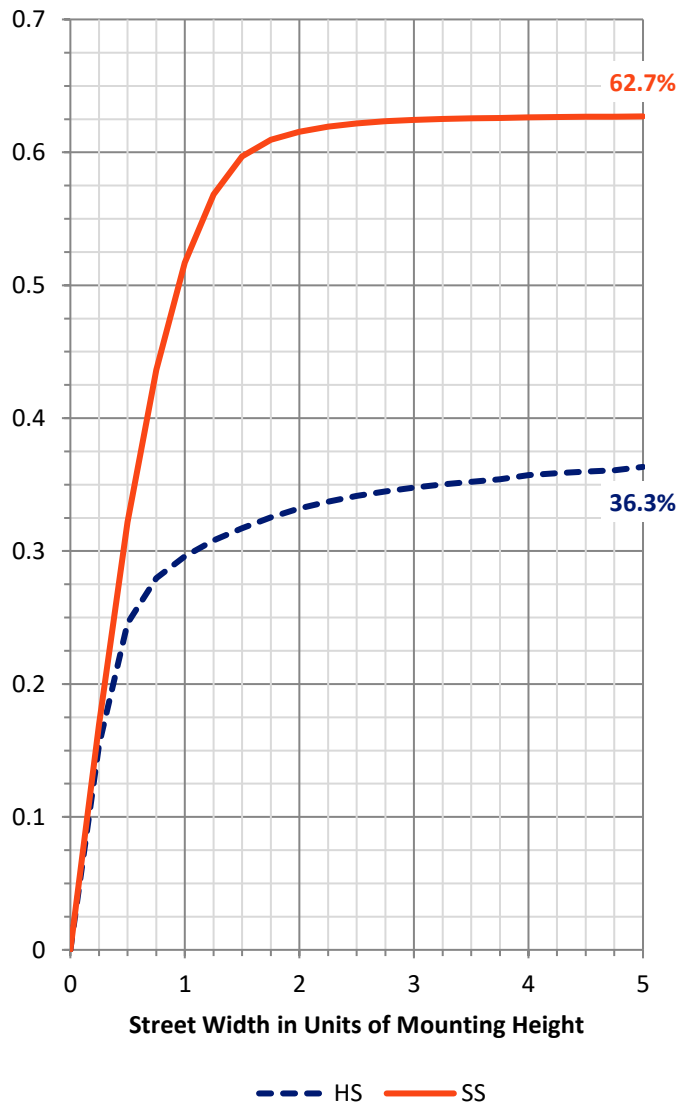
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5423.7	0.0	5423.7
	% Fixture	37.4	0.0	37.4
Street Side	Lumens	9077.3	0.0	9077.3
	% Fixture	62.6	0.0	62.6
Total	Lumens	14501.0	0.0	14501.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.1	2.9
10°-20°	1295.6	8.9
20°-30°	1877.6	12.9
30°-40°	2307.1	15.9
40°-50°	2603.9	18.0
50°-60°	2474.4	17.1
60°-70°	1848.0	12.7
70°-80°	1372.4	9.5
80°-90°	299.9	2.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	14501.0	100.0
0°-180°	14501.0	100.0

Coefficient of Utilization

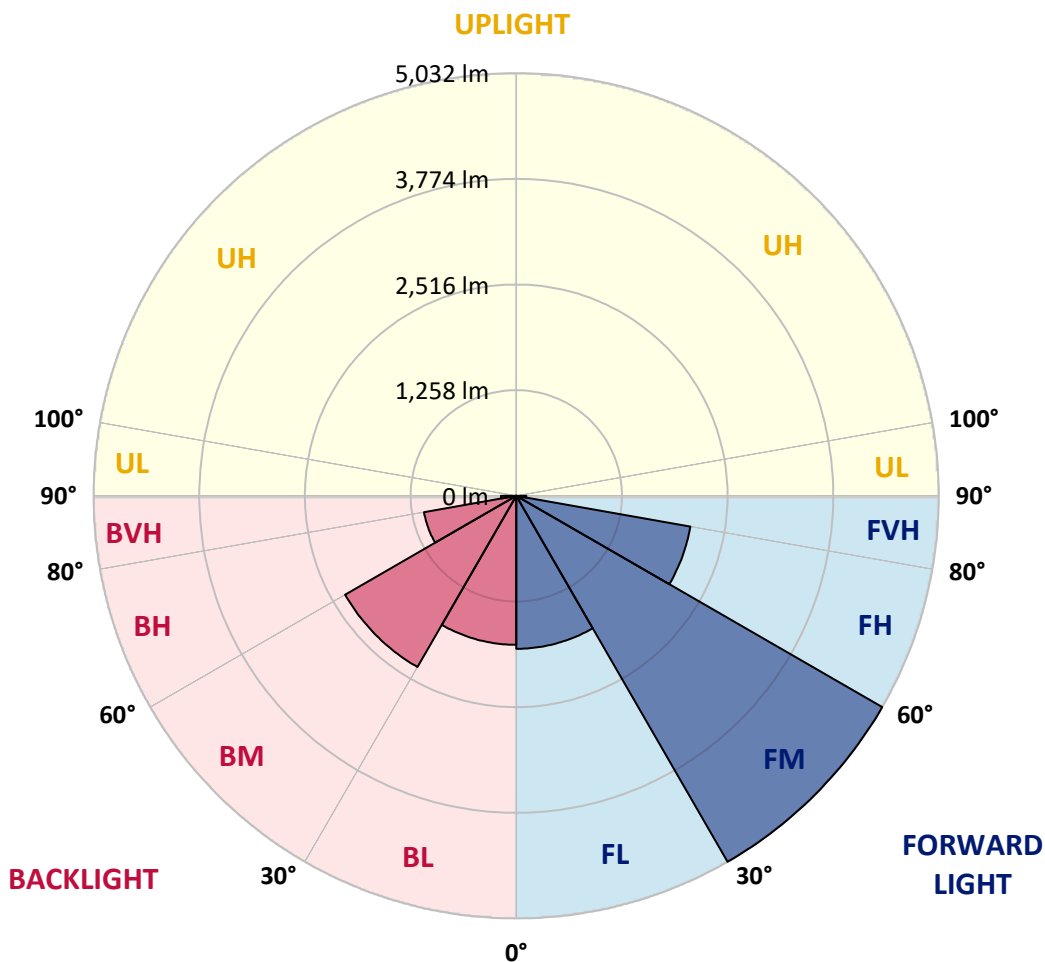


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1821.4	12.6			
FM	(30°-60°)	5031.9	34.7			
FH	(60°-80°)	2105.4	14.5			G2/5000
FVH	(80°-90°)	118.6	0.8			G2/225
BL	(0°-30°)	1773.9	12.2	B3/2500		
BM	(30°-60°)	2353.5	16.2	B2/2500		
BH	(60°-80°)	1115.0	7.7	B3/2500		G3/2500
BVH	(80°-90°)	181.3	1.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8
2.5°	4125.7	4103.1	4109.2	4143.9	4077.1	4125.7	4105.7	4152.6	4168.2	4166.5	4234.2
5°	4159.5	4130.0	4138.7	4162.1	4089.2	4126.6	4110.9	4161.3	4174.3	4175.2	4267.1
7.5°	4283.6	4249.8	4241.1	4242.8	4174.3	4202.1	4162.1	4201.2	4224.6	4222.0	4324.4
10°	4464.1	4426.8	4407.7	4401.7	4318.4	4306.2	4257.6	4271.5	4306.2	4310.5	4414.7
12.5°	4649.9	4620.4	4592.6	4578.7	4464.1	4437.2	4366.1	4378.2	4404.3	4409.5	4518.0
15°	4813.9	4786.1	4781.8	4766.2	4649.9	4597.8	4511.9	4498.9	4518.8	4535.3	4629.9
17.5°	4653.3	4617.8	4595.2	4600.4	4541.4	4409.5	4356.5	4445.9	4612.5	4670.7	4760.1
20°	4200.3	4243.7	4225.5	4155.2	4091.8	4305.3	4260.2	4241.1	4344.4	4419.0	4635.1
22.5°	3690.0	3690.0	3863.6	3985.1	4009.4	4129.2	4375.6	4461.5	4472.8	4472.8	4410.3
25°	3286.5	3401.0	3695.2	4156.9	4159.5	4135.2	4203.8	4675.0	4753.1	4744.5	4639.5
27.5°	3442.7	3423.6	3621.5	3942.6	4396.5	4368.7	4235.0	4447.7	5091.6	5051.7	4917.2
30°	3580.7	3561.6	3597.2	3995.5	4464.1	4622.1	4507.5	4444.2	5109.8	5326.8	5246.1
32.5°	3710.0	3688.3	3729.1	3789.8	4248.1	4873.8	4793.1	4751.4	4849.5	5060.4	5618.4
35°	3814.1	3817.6	3864.5	3953.9	4163.9	4788.7	5079.4	5095.1	5266.9	5253.9	5535.9
37.5°	3891.4	3898.3	3939.1	4045.0	4123.1	3955.6	5351.9	5532.5	5797.1	5771.1	5563.7
40°	3895.7	3911.3	3992.9	4123.1	4215.1	3522.5	5301.6	6015.0	6277.1	6200.7	5942.9
42.5°	3815.0	3822.8	3959.1	4179.5	3198.8	3664.0	4916.3	6495.8	6612.9	6519.2	6232.8
45°	3743.0	3741.2	3887.0	4084.9	3022.7	3829.8	4905.9	6356.0	6921.9	6849.0	6483.6
47.5°	3641.4	3640.6	3782.9	3073.9	3060.9	4008.5	5164.5	5511.6	7177.9	7099.8	6711.8
49°	3559.9	3568.5	3669.2	2772.7	3078.2	4108.3	5290.3	5655.7	6927.1	7216.1	6838.5
50°	3515.6	3524.3	3278.7	2742.4	3083.4	4165.6	5356.3	5761.6	6234.5	7019.1	6920.1
52.5°	3314.3	3237.9	2541.9	2679.0	3085.2	4233.3	4605.6	5986.3	5942.1	5850.9	6552.2
55°	1996.9	2259.8	2301.5	2607.0	3057.4	3074.7	4498.9	6247.5	6228.5	6095.7	5641.8
57.5°	1210.6	1198.5	1777.3	2406.5	2047.2	2578.3	4675.0	6592.9	6480.1	6303.1	5738.1
60°	427.0	377.5	381.0	410.5	762.0	1929.2	3729.1	4964.9	6532.2	6504.4	5825.8
62.5°	33.8	32.1	32.1	33.8	48.6	724.6	2956.7	4980.5	6712.7	6640.7	5845.7
65°	4.3	4.3	4.3	9.5	25.2	655.2	2961.1	5061.2	6847.2	6724.0	5792.8
67.5°	0.0	0.0	2.6	6.9	20.0	579.7	2874.3	5108.9	6967.9	6793.4	5744.2
70°	0.0	0.0	1.7	6.1	17.4	479.9	2768.4	5150.6	6911.4	6695.4	5499.5
72.5°	0.0	0.0	1.7	5.2	14.8	316.8	2454.2	4842.5	6509.6	6275.3	4997.0
75°	0.0	0.0	1.7	4.3	13.9	180.5	2010.8	4278.4	5792.8	5544.6	4210.7
77.5°	0.0	0.0	0.9	3.5	12.1	98.9	1389.4	3541.6	4785.2	4512.7	3154.6
80°	0.0	0.0	0.9	3.5	11.3	67.7	631.8	2300.6	3189.3	2848.2	1728.7
82.5°	0.0	0.0	0.9	3.5	8.7	46.0	255.1	644.8	986.7	843.5	550.2
85°	0.0	0.0	0.9	2.6	6.1	29.5	125.8	264.7	398.3	382.7	278.6
87.5°	0.0	0.0	0.9	2.6	4.3	8.7	37.3	86.8	155.3	157.9	118.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8	4216.8
2.5°	4266.3	4274.1	4300.1	4339.2	4345.3	4398.2	4389.5	4488.4	4498.0	4521.4	4547.5
5°	4311.4	4338.3	4397.3	4486.7	4551.8	4631.6	4623.8	4735.8	4747.1	4741.0	4780.9
7.5°	4377.4	4417.3	4509.3	4629.9	4651.6	4750.5	4737.5	4834.7	4836.4	4823.4	4862.5
10°	4473.7	4520.6	4605.6	4674.2	4726.2	4786.1	4777.4	4864.2	4855.5	4840.8	4881.6
12.5°	4566.6	4592.6	4644.7	4725.4	4734.9	4759.2	4744.5	4825.2	4816.5	4795.7	4833.8
15°	4649.9	4662.9	4663.7	4703.7	4682.0	4700.2	4661.1	4719.3	4699.3	4691.5	4718.4
17.5°	4756.6	4732.3	4696.7	4694.1	4620.4	4595.2	4532.7	4548.3	4506.7	4503.2	4518.0
20°	4770.5	4820.8	4718.4	4612.5	4488.4	4425.1	4307.1	4307.9	4261.1	4242.8	4251.5
22.5°	4390.4	4514.5	4743.6	4541.4	4330.5	4188.2	4036.3	3990.3	3901.8	3864.5	3849.7
25°	4538.8	4377.4	4360.0	4421.6	4125.7	3908.7	3688.3	3552.9	3447.9	3362.9	3368.9
27.5°	4768.8	4558.7	4134.4	4159.5	3867.9	3563.3	3231.0	3040.0	2933.3	2850.8	2841.3
30°	5073.4	4809.5	4183.0	3605.0	3572.0	3129.4	2721.5	2510.6	2402.2	2372.7	2354.4
32.5°	5451.7	5108.1	4292.3	3478.3	2955.8	2659.9	2202.6	2032.5	1981.3	1978.7	1957.8
35°	5901.3	5502.9	4393.0	3309.9	2548.8	2166.1	1760.0	1648.0	1655.8	1656.7	1674.1
37.5°	5614.0	5876.1	4518.8	3150.2	2152.2	1609.8	1415.4	1345.1	1367.7	1404.2	1421.5
40°	5618.4	5349.3	4665.5	2883.8	1672.3	1228.0	1107.4	1091.7	1188.1	1261.8	1280.1
42.5°	5844.0	5314.6	4611.7	2580.1	1224.5	933.8	922.5	1006.7	1145.5	1228.0	1242.7
45°	6086.1	5479.5	3830.6	2149.6	887.8	789.7	876.5	993.7	1144.7	1232.3	1241.0
47.5°	6316.1	5583.7	3671.8	1680.1	713.4	744.6	862.6	993.7	1150.8	1240.1	1245.3
49°	6418.5	5667.8	3524.3	1359.0	669.1	727.2	854.8	995.4	1152.5	1228.9	1231.5
50°	6479.3	5715.6	3405.4	1260.1	647.4	716.0	851.3	998.0	1149.9	1215.8	1218.4
52.5°	6573.9	5792.8	3132.0	1004.1	606.6	689.9	846.1	1008.4	1140.3	1179.4	1177.7
55°	5421.4	5414.4	2903.8	842.7	575.4	666.5	844.4	1017.1	1144.7	1184.6	1182.9
57.5°	5195.7	4445.9	2446.4	689.1	549.3	646.5	846.1	1030.1	1222.8	1292.2	1283.5
60°	5212.2	4378.2	2081.9	597.9	519.0	630.0	851.3	1088.3	1412.8	1483.1	1461.4
62.5°	5154.9	4212.5	1863.2	537.2	486.9	615.3	854.8	1169.0	1437.1	1443.2	1405.9
65°	5018.7	4004.2	1569.0	470.4	453.0	601.4	854.0	1198.5	1326.1	1276.6	1264.4
67.5°	4766.2	3782.9	1241.9	412.2	416.6	580.6	873.9	1147.3	1254.9	1215.0	1196.7
70°	4466.8	3310.8	875.6	358.4	383.6	557.2	871.3	1135.1	1217.6	1158.6	1133.4
72.5°	3933.9	2783.1	589.3	308.9	341.9	530.2	827.0	1098.7	1193.3	1154.2	1119.5
75°	3126.8	2082.8	341.9	266.4	301.1	491.2	783.7	1076.1	1206.3	1131.7	1059.6
77.5°	2137.5	1186.3	255.1	223.0	259.5	440.9	710.8	1000.6	1166.4	1102.2	1005.8
80°	958.1	428.7	195.3	181.4	217.8	357.5	612.7	885.2	1104.8	1104.8	1037.1
82.5°	381.0	269.9	135.4	142.3	177.9	272.5	485.1	763.7	973.7	1018.0	1088.3
85°	215.2	157.9	86.8	103.3	136.3	210.9	353.2	593.6	793.2	879.1	952.9
87.5°	85.0	59.9	34.7	58.1	79.0	108.5	154.5	290.7	427.0	525.9	581.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)